/32 cont./

765 If the survivors so desire, the bones are later dug up again and deposited in separate shallow clay containers near the grave.

Memories of the dead do not fade quickly. Long after the death of a family member, the devotion of his relatives is expressed in violent outbreaks of pain when a reminder of the deceased is evoked by some event. If, while examining storage baskets in the houses, we came across objects from the estate of departed spouses or children, the women broke out in loud lamentation, which stopped only when the object concerned was hidden again.

765 In the last Šambioa village I witnessed a scene of mourning
[464] as unique as it was touching, when the news arrived that a Karaya had died in Pará, where he had gone on a boat as a hired rower. His mother and wife paced up and down on the bank for two days, while solemnly mourning loudly in song, holding ornamental objects of the lamented in their hands and continually waving them downstream where he had disappeared.

[533] The mourning songs were continued, accompanied by other women, far into the night.

Sicknesses and Witch Doctors

164 On the whole the Karaya have been spared from the worst scourges of primitive peoples, smallpox and syphilis, just as little are they subject to the leprosy and goiter so widespread in the population of Goyaz. On the other hand tuberculosis, the infectiousness of which is well known to the Indians, is steadily increasing among the Karayahi. Ahi catarrho naõ tem? Is there no catarrh, too? is always the first question which they ask the foreign visitor before they allow him to enter their huts. Malaria fevers occur in their more intensive form also only in the Karayahi region, particularly in the lowlands between São José and the mouth of the Rio das Mortes.

●757 Medicines are apparently used by the savage tribes of South America to a much lesser degree than one generally assumes.

/32 cont./

754 Since every sickness is considered the work of hostile sorcerers
755 or demons, they rely more on the counter magic of their own "medicine man" who removes the poison by sucking on the ailing part of the body or scares off the evil spirits by means of the magic rattle.

757 One of the most popular medicines of the Karaya is the resin of the almecega (Hedwigia balsamifera), which, stirred in with coconut oil, is used as a smelling essence for headaches and externally for abdominal pain (andžiura).

752 The savages have more knowledge of surgery. They know how to let blood out of the forehead vein, to stop bleeding by applying a tourniquet to the wounded limb, quite rationally sprinkle powdered charcoal on wounds, put splints on broken limbs, and develop great skill in removing thorns with sharp fish-teeth.

757 The custom of emptying the stomach in the morning by artificially induced vomiting, known in North America and Ecuador, is also found here. It is done with charred pieces of taquara (idžiua), which are introduced into the throat until the effect is achieved.

304 824 237 751 The most important medical instrument is the scarification apparatus (i-šaura). It consists of a little triangular or rectangular piece of gourd, one surface of which is weighted with a layer of wax or resin one centimeter thick, while the other bears a row of small sharp fish-teeth (Fig. 17).

Fig. 17. Scarification instrument (1/2).

304 757 These scarifiers are stored in pairs, the convex scratching surface of the one resting on the concave one of the other. The small teeth are protected by stuffing cotton between them.

/33/

304 While the patient convulsively clasps a pole, the points are
757 pressed deep into the skin of the ailing part of his body, and it is scratched open in various directions with quick movements. The blood is scraped off with strips of palm leaves, the wounds rubbed with sand in the bath. It is said to be not uncommon that pulverized pepper is applied to increase drainage.

Even when there is no special suffering, such blood-lettings are done from time to time on legs and arms, "in order to strengthen muscle power."

753 The belief common to all primitive peoples that sickness,
171 as well as death, is something highly unnatural and comes about only through the influence of hostile powers, which the witch doctor alone knows how to ban, prevails among the tribes of South America in such a completely similar manner that everything known about it from one people also holds without additions
[114] for the others. One need only refer to the lucid, exhaustive presentation by Im Thurn (1), to which there is hardly anything to add.

1. Im Thurn, op. cit., p. 328 ff.

756 Among the Karaya the rank of witch doctor (kahotebädõ, according to Spinola hori), of which every village possesses several, does not belong to a closed caste any more than it does among the Xingu tribes.

Anyone who is willing to undergo the required mortifications can become a sorcerer. Nervous individuals, epileptics, etc. are, of course, especially suited for it. Even women can attain this office.

789 We had no opportunity to observe the medicine man treating
791 the sick, but did observe him in his no less important activity
[206] as rain conjurer. He stepped ceremoniously in front of the hut, holding a tobacco pipe in one hand, in the other a long switch with thornback spines stuck on the tip. His face turned toward the heavens, he uttered inarticulate sounds in a loud voice, again and again blew smoke towards the clouds, then mumbled, swinging his staff around his head, incomprehensible words

/327 cont./

843 Birth. During pregnancy the women wear small plaited mats around their hips, which they hold together in front with
847 their hands. Pregnancy is prematurely interrupted when the woman eats a powder made of pounded white stone (mănaŭlă) or drinks blood. Artificial abortion is not regarded as prohibited.

844 Birth takes place in the house (according to one isolated statement, also in a house built especially for this); the woman, squatting, according to Ehrenreich, is supported by her mother. The husband does not participate (according to Ehrenreich, on the other hand, he helps his wife). There are said to be all kinds of medicines to ease the birth. The umbilical cord is cut with a taquara splinter and ashes are placed on the wound. The afterbirth is buried in the forest.

846 Confinement is very brief. The mother lies in the hut for only one day; on the second day she is already up. After four days have elapsed, during which she eats only honey and some manioc mush, she washes herself in the shade with hot water which she has in a pot standing beside her. After that she resumes her work and may again eat everything. In former times the husband was likewise obliged to adhere to a certain diet, whereas allegedly he no longer does this today. In ancient times, "when the Karajá were still living under water," he adhered to
●[757] a diet for five months. Later, the husband merely remained in the house for six days; he ate neither fish nor manioc -- they were supposed to be too hard -- and daily emptied his stomach by vomiting, which he induced by eating honey with pepper or pineapple with pepper.

How long after the birth the husband stays away from his wife was not to be determined; in any case, however, the wife is treated with consideration for some time.

844 The skull of the newborn baby is pushed into proper shape by the father of the mother, or, according to another report, by the grandmother. It is then washed with warm water, then smeared with urucú and almesqua resin, whereby the red mucus comes off and the child becomes light. Then it is apparently

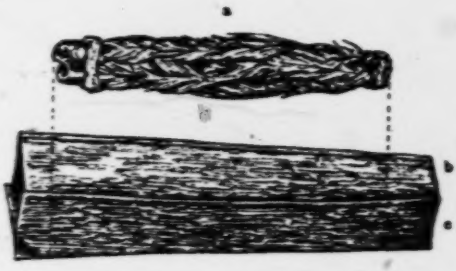
/335 cont./

754 eel with the right hand against the index finger of the left and thus aims at the passerby. He must die if he does not immediately
755 have himself treated by the doctor. The doctor sucks the leg of the bewitched one, beats him on the back, chest, arms, and legs with a switch, and in this way draws the magic out of the body. He himself then rolls around on the ground, spits, etc., in order, for his part, to get rid of the magic. The electric eel is stored in two palm-leaf husks (Ill. 186 b,c).

The use of charcoal as the carrier of the magical remedy is striking.

754

Ill. 185 a, b.
Mo[illegible] penis. b) Back [illegible] of the glans in a).



Ill. 186 a-c.
Electric eel with protective sheath.

75 Medicine. All illnesses are regarded as originating from the evil magic of others. As a result, witch doctors, whose task is to
757 apply countermagic, play an important role. In addition, however, a great many medicinal plants are used, some of which are supposed to be infallible. I succeeded in obtaining a number of such plants, together with information about their use.

755 The doctors (kōlŭ, kâudŭwādŭ; according to Ehrenreich,
757 kahŏtĕbădó) carry on their practice by means of magical performances, singing, swinging rattles, sucking out the morbific agent, massaging, beating with switches which have electric-eel bones attached at the

/335 cont./

755 ends, as well as by the utilization of medicines to be used in-
757 ternally and externally. Altogether I learned of seven doctors,
756 but their number may be larger. One of these, in Village 16, was regarded as an evil witch doctor. The sick chief of this village was not being treated by him, but rather downstream in Village 19 by a famous doctor to whom the Karajá came from
758 afar to be cured. He had opened a sort of hospital: several
756 mat walls had been stretched, in the shade of which the sick lay on mats, tended and supported by their relatives. There were three or four sick persons of both sexes lying here.

114 I did not see any curing ceremonies. In Village 14 I heard
755 singing and rattling coming from the west end of the village, but I was not permitted to go there when I announced my intention of observing Chief Ilk from Village 13 during his activity as doctor.

756 The doctors are paid for their services in boats, pots, food, etc. If the patient dies, they allegedly receive no payment.

752 The Karajá have considerable knowledge of surgery.
[278] Minor wounds are brushed with the decoction of a red tree bark (ōdŭdĕwŏ́) which is kept in large quantities in pots with a little water. Or ashes are sprinkled on bleeding wounds (for example, cutting the umbilical cord), or a little urucú oil color is brushed on minor injuries, so that flies do not get on them. Applying tourniquets to injured limbs also seems to be known already. Festering leg wounds (as a result of injury: kūdjú) are washed with warm water; in this way they heal by themselves.

Deep wounds, such as those from arrow shots and the like, are /336/ also cauterized. For this, a human lower-leg bone is used (Ill. 187; dēĭ́ or wŏlĭsõ̆tĭ́), which is wound with bast. Its lower end is browned from the fire. In the case of arrow shots, another remedy is said to be used, one that brings about complete healing in a very short time, allegedly in one day (?).

Broken limbs, according to Ehrenreich ("Beiträge," p. 32), are healed with splints. The chief of Village 16, whom I met in the hospital, /Ill. 187 appears here/ allegedly had a broken leg, but there was no splint bandage. According to Kuriší's statement, they do not know how to heal broken arms and legs.

/336 cont./

I saw an umbilical hernia only once, in the case of a boy.

I did not learn anything about bloodletting, which Ehrenreich reports.

Scarification is very common; almost all Indians bear the scratch scars from it on upper arms and thighs. I was unable to observe anything about the procedure, which Ehrenreich ("Beiträge," p. 33) describes. Concerning the apparatus used for this, see above, page 109, Ill. 51.

Ill. 187.
Bone for cauterizing wounds.

Of illnesses for which the cure is not known to me, I saw a blind girl, a man blind in one eye, and a boy with dropsy, as well as a man whose legs were atrophied up to his knees and who was able to move forward only by crawling on hands and knees.

Ehrenreich reports ("Beiträge," page 32) that in the morning they induce vomiting by inserting a charred taquara rod into their throats, in order to empty the stomach in this way. He even brought back such sticks (Berlin 3964). I never observed this custom, but, as related above, simply heard that husbands induce vomiting artificially during the couvade (see page 273).

In the following I shall discuss the other illnesses, insofar as I obtained information about them; I shall stress in particular observed cases of illness.

In case of snake bite the affected limb is tied up and some pounded dōăhĭ root is put on it.

There are very many remedies for indigestion and intestinal disorders. For indigestion three different roots are used. Either one pounds the mōnă root (in Brazilian allegedly murizĭ), mix

/336 cont./

757 824 it with water, and drink the liquid, or one takes, in the same way, mixed with cold water, the pounded root of a cipo plant [b(ŭ)dōīlūlĕ]. Finally, the root of a shrub which is cultivated for this purpose in the plantings is gnawed with the teeth in case of stomach pains. For intestinal disorders, two roots (dĭlùakŏzĕ and bēdĭ) are /337/ crushed, each cooked separately, and the two decoctions mixed and drunk.

There are also several laxatives. The root ălăhĭnŏ (in Brazilian allegedly tiŭ) is pounded, cooked in water, and drunk as a purgative, or one uses the root of a vine (hămbūlādòè), which is pounded and extracted with cold water.

Jaundice and anemia in young people are cured by pounding the leaves of a red-blossomed creeper (dōwĭlĭză) growing on the goyaba and rubbing the body with it. Jaundice is caused 261 chiefly by the eating of clay, which is put into ball form. This eating of clay is probably to be traced to the lack of salt. Instead of clay, ashes and sand are also eaten, which are said to have a constipating effect. I often observed how the Indians ate the sand from the sandbanks by the handful.

In order to grow fat, they eat a certain small fruit.

757 In spite of the good teeth which the Indians enjoy, tooth-[164] ache seems to occur more often than one is inclined to assume. Though I did not observe any cases, they have a whole number of remedies for it. For example, they use the sheath of pieces of root and twigs called kŭsĭ (in Brazilian the so-called para tudo), [752] as well as a small fruit called sĭbūrĕ. Teeth are not extracted; if they ache, this remedy is used. Otherwise they are left to drop out by themselves.

[164] I observed only one head cold (wādŏwĕ), in the case of an older man. As a remedy he had wound a palm-leaf binding around his head. Apparently his head was very dizzy, for he held it in front and back with both hands.

164 I often observed coughs (wādŏ); many Indians had a slight 757 cough, probably as a result of the cool nights. The children in Village 17 apparently had whooping cough; when coughing, they had choking spells, until they succeeded in coughing up the

/337 cont./

164 757 mucus. The mothers would pound them on the back; no other remedy was known. The coughing was explained as a consequence of the cold nights and the lack of blankets. They do not know any remedy for coughs.

164 I did not observe any tuberculosis. Ehrenreich reports ("Beiträge," p. 32) that the Karajá suffered from it, that they were aware of its danger and greeted every stranger with the question: "ahi catarrho não tem?" Now this custom has disappeared, probably with the decline of the disease.

[757] For chest pains they use ipipokama emetic powder (hãdãõ).

Fevers apparently are rare from May to October. At any rate, I did not see any attacks of fever in the villages. Only one of my Indian rowers was afflicted with a severe fever for three days in August. Fevers are said to be frequent, however, at the end of the rainy period, especially in the swamp region between São José and the Rio das Mortes; this stretch is therefore not 757 permanently occupied by the Indians. As a remedy they use the [824] /338/ plant kŏdũlāzĭ; it is pounded and mixed with hot water, and with this infusion the body, especially arms, shoulders, and chest, is washed. When this has been done four times in one day, the fever is said to be gone.

[164] Smallpox is unfailingly cured (as I was several times assured in answer to my question), and, indeed, the cure takes place on the eleventh day of the illness. It occurs as follows: [824] The four roots, nãũĕkĭedĭzũ̆, sĭndăkálăndõ̆, klăklă̆, lõlũõ̆, are pounded, mixed with water, and drunk. The drink is followed by profuse sweating. For eleven days this is taken three times a day, noon, afternoon, and evening, and during this time only very small, boiled fish are eaten. On the eleventh day the sickness is gone.

[164] Measles cannot be cured. In 1906/07 a severe measles epidemic must have afflicted the Karajá. Many people are supposed to have died because they bathed in the river during the fever. For this reason bathing is not permitted during any [262] illness now. Grilled piranhas and manioc mush serve as food for the sick; even the parents of the sick eat only these foods during the illness of their children.

/338 cont./

[757] [164] [834] Venereal diseases are rare. The Karajá systematically avoid them in that infected Karajá, as long as they are not cured, are prohibited from intercourse with the women and possibly banished from the tribe altogether. Pedro I, who became infected in Conceição, said that if he went home that way he would be unable to remain there: he would then no longer be a Karajá. They seem to have a remedy for syphilis, but it is said to be effective only in the hands of a good doctor.

Persons with infectious diseases are left alone; even the doctor does not pay any attention to them. The people simply move away, but leave food behind for them. If they die, the [153] others come and bury them. With death the disease, even an infectious one, is regarded as obliterated.

158 Mental illnesses seem to be very rare. I observed only one epileptic youth. Every month at the first quarter of the moon he is said to thrash about and walk around with his eyes closed. He had a strange look and his movements were heavy. For no reason [828] that I could see, he was suddenly seized by the others, overpowered, and thrown down; after a time he was permitted to get up again and walk about freely, but he was always kept under control.

828 According to their view, mental illness (ĭdjŏdĕ) is located in the small of the back.

Raving madness (ãhãhã̆) is incurable. During attacks the patient, by order of the chief, is bound at ankles and hands and laid on a mat in the shade.

158 In Schischá, on my return journey, I observed a strange custom, which probably goes back to a sadistic tendency. At night, the old bachelor, Maudihi, and Mãŭzĭ were sitting with me in the tent. Suddenly the bachelor leaped at Mauzi's throat and squeezed it, saying, I want to kill you, and then finally let go. Thereupon all /339/ three of them tried this on themselves. They threw their heads back, placed their hands around their throats from behind, and, holding the breath, squeezed the larynx together from both sides with their thumbs. After a while, they let go, swallowed a few times, and took a deep breath. Extreme satisfaction was reflected on their faces.

6:Cook M-3,4 (ca. 1900) 1909.
SP9 Caraja SP9

765 it is always the women—broke out into loud lamentations and wailings, which did not cease until the objects were again hidden from view. He says that he witnessed at a Sambiõa village a very pathetic mourning scene when the news came that a certain resident of the village had died in Pará, whither he had gone as a paddler in one of the trading boats descending the river. The mother and the wife of the deceased paced up and down the bank of the river near the village during two entire days, uttering continually loud and solemn cries of mourning. In their hands, they carried his ornaments and waved them constantly in the direction of the place where he had died. With the assistance of other women, the wailing was continued throughout the night. But whatever may be the real sentiments of the relatives, lamentations and wailing must not be omitted.

164 The Karayá have not suffered as much from smallpox and goitre as other primitive peoples. But tuberculosis is increasing among them, and they know that it is infectious. "Is there any catarrh where you hail from?" is the first question they ask a stranger before he is allowed to enter their huts. Intermittent fevers exist among them only in certain
753 low regions. They use but little medicine, for all sickness and disease is looked upon as demon possession, or the result
755 of witch-craft. Therefore, they trust to their conjurers, or tribal priests, to relieve illness. These men seek to remove the fancied poison or disturbing element by sucking the part of the body where the pain is located, or to expel the evil spirits by performing enchantments, or practicing black arts.
757 One of the most noted medicaments of the Karayá, is the resin of the almecegêira tree, which is mixed with cocoa-nut oil and taken in the form of snuff for headache, and also rubbed on the abdomen to cure stomach-ache.

000 Bates, in his valuable work, "The Naturalist on the Amazon," says: "No one could live long among the Indians of the Upper Amazon without being struck with their constitutional dislike for heat. Europeans certainly withstand the high temperature better than the original inhabitants of the

6:Cook M-3,4 (ca. 1900) 1909
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country. Their skin is always hot to the touch, and they perspire but little." (This may be owing, in some degree, to the clogging of the pores of the body with the gummy, red grease with which they keep themselves constantly besmeared.) * * * "They bathe many times each day, but do not plunge into the water, taking merely a sitz bath, as dogs may be seen doing in hot climates, to cool the lower parts of the body. The women and children who have remained at home while the men are away fishing and hunting, generally find some excuse for trooping off to the shade of the forest during the hot hours of the afternoon. They appear restless and discontented in fine, dry weather, but cheerful in cool days, when the rain is pouring down on their naked backs. When suffering from fever, nothing but strict watching can prevent them from going to bathe in the river, or eating immoderate quantities of juicy fruits, although these indulgences are frequently the cause of death. They are much subject to disorders of the liver, dysentery, and other ills of hot climates; and when any epidemic is about, they take it quicker, and suffer more than negroes, or even whites. How different all this is with the negro, the true child of tropical climes! The impression gradually forced itself upon my mind that the Indian lives as a stranger or immigrant in these hot regions, and that his constitution was not originally adapted, and has not since become perfectly adapted to the climate."

The Karayá possess some knowledge of surgery. They know how to open arteries on the temple; how to bleed a patient; how to stop the flow of blood from a wound by binding the artery; understand the efficiency of sprinkling powdered charcoal upon wounds; have knowledge to bind on splints in setting broken bones, and know how to extract thorns from the flesh, which is done by means of sharp fish teeth. To empty the stomach by vomiting, they tickle the throat with the burnt end of a reed.

They make use of a scarification, or bleeding instrument, which is a block or pad set full, and bristling, with the long, lance-like teeth of the piranha fish. It resembles a curry-

6:Cook M-3,4 (ca. 1900) 1909
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comb with very long, sharp teeth. With this barbarous tool, the primitive surgeon rakes and tears the back of the patient, who holds himself immovable by firmly grasping a post or tree. The blood is caught and removed on palm-leaves. When sufficient blood has been drawn, sand, and finally pepper, is rubbed into the wounds. Even when a Karayá is not sick, he submits to this very painful operation, believing that it will be beneficial to his health. The bleeding of persons on the back is practiced by low-class civilized Brazilians.

Not much is known concerning the religious belief of the Karayá. But it is fully established that they entertain an animistic conception of the world, which is the lowest form of religious belief and practice; and it expresses itself with them in the same way that it does with the better known South American tribes. Their observation hourly suggests to them the idea that every effect has an intelligent cause; for, whenever they are able to trace an effect to its cause, as, for instance, in the doings of men and animals, that cause appears to be psychical rather than material; an intangible, incomprehensible something that we call Mind. Therefore, they firmly believe that Minds, intelligence, or invisible, immaterial Personalities, dwell, as an Ego, or as Genii, in every material object, animate or inanimate, such as animals, trees and mountains, and direct all the operations of Nature; and that brutes are differentiated from men only by their bodily form, every creature being alike a duality—having a psychical as well as a physical Self. Moreover, the phenomena of the half-life in sleep, together with dreams and visions, and the cessation of all vital activities at death, furnish to their minds clear and positive proofs of the existence of a spirit world that pervades, or lies beyond the world comprehended by the senses. They believe that in sleep and dreams, the Ego, or Shade, or second Self, steals away from the body of the sleeper to roam about and to associate with other shadowy personalities or spirits. They are convinced, furthermore, that their priests, or conjurers, are endowed with some supernatural, or mysterious powers which enable them to put themselves